

REMARKS

Applicants thank the Examiner for the thorough examination given the present application.

Claims 2, 4-9, 11-13 and 15-19 are pending, and claims 1 and 17 are independent. Claims 4-9, 12, 13, 15 and 17 are amended to correct minor informalities, and claims 10 and 14 are cancelled at this time. No new matter is introduced.

Reconsideration of the present application, as amended, is respectfully requested.

Interview Summary

Applicants greatly appreciate the Examiner for discussing this application with Applicant's representative on December 17, 2008. In the interview, the Rule 1.132 Declaration and proposed amendments to the claims were discussed. The Examiner indicated that upon officially submitting an amendment, the amendment would be fully considered. Thus, no agreement was reached pending submission of claims for the Examiner's further review.

Claim Objection

Claim 10 is objected to under 37 C.F.R. 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim.

By way of the present submission, claim 10 is cancelled. Thus, this objection is moot.

Claim Rejections under 35 USC §§ 102/103

The Examiner has rejected the following claims under 35 USC 102/103:

- (A) Claims 2, 4, 5, 9-11, 13-15 and 17-19 under 35 USC 102(b) as anticipated by or in the alternative under 35 USC 103(a) as obvious over Mizoguchi '468;
- (B) Claims 6-9, 12 and 16-18 under 35 USC 103(a) as obvious over Mizoguchi '468 in view of Honda '429;
- (C) Claims 6-9 under 35 USC 103(a) as obvious over Mizoguchi '468 in view of Ijima '469;
- (D) Claims 2, 4, 5, 9-11, 13-15 and 17-19 under 35 USC 103(a) as obvious over Mizoguchi '468 in view of Minemura '095, Ikeda '663, Nakagawa '529 or Okamoto '678;
- (E) Claims 6-9, 12 and 16-18 under 35 USC 103(a) as obvious over Mizoguchi '468 in view of Minemura '095, Ikeda '663, Nakagawa '529 or Okamoto '678 and further in view of Honda '429;
- (F) Claims 6-9 under 35 USC 103(a) as obvious over Mizoguchi '468 in view of Minemura '095, Ikeda '663, Nakagawa '529 or Okamoto '678 and further in view of Ijima '469; and
- (G) Claims 2 and 4-19 under 35 USC 103(a) as obvious over Honda '429 in view of Minemura '095, Ikeda '663, Nakagawa '529 or Okamoto '678.

These rejections are respectfully traversed.

Claim 13 of the present invention includes a combination of elements and is directed to a composite sheet for artificial leather, comprising a non-woven fabric layer made of ultra fine fibers of a polyester based resin or a nylon based resin; a woven or knitted fabric layer made of ultra fine fibers having the same resin as the non-woven fabric and having a fineness of 0.01 to 0.3 denier; and a polyurethane resin, wherein the ultra fine fibers of the non-woven fabric layer and the ultra fine fibers of the woven or knitted fabric layer are entangled with each other and the fineness of the ultra fine fibers of the woven or knitted fabric layer is not more than the fineness of the ultra fine fibers of the non-woven fabric layer.

claim 17 recites a composite sheet for artificial leather, comprising a non-woven fabric layer made of ultra fine fibers of a polyester based resin or a nylon based resin; a woven or knitted fabric layer made of ultra fine fibers having the same resin as the non-woven fabric layer and having a fineness of 0.01 to 0.3 denier; and a polyurethane resin, wherein the ultra fine fibers

of the non-woven fabric layer and the ultra fine fibers of the woven or knitted fabric layer are entangled with each other and the composite sheet has a stitching strength of more than 30kg/mm, an elongation at constant load of less than 20% and a stiffness of less than 80mm.

By way of the claimed invention, the composite sheet possesses excellent softness, uniformity of color, excellent elongation and form stability.

Mizocuchi relates to a composite fabric composed of (A) a woven or knitted fabric constituent and (B) at least one non-woven fabric constituent, which the non-woven fabric constituent (B) consists of numerous fibrous bundles (1) and numerous individual fibers (2). Numerous fibrous bundles (1) are composed of a plurality of individual fibers arranged parallel to each other, and varying in the number of the individual fibers from which the bundles are formed. Numerous individual fibers (2) are independent from each other and from the fibrous bundles (1). Also, the woven fabric layer (A) has a denier of 3 or less, more preferably 0.5 to 3. The fibrous bundles (1) of the non-woven fabric layer (B) has a denier of 1-200, more preferably 2-60 and the individual fibers (2) of the non-woven fabric layer (B) has a denier of 0.5 or less, more preferably 0.05-0.5, most preferably 0.01-0.3.

Honda discloses a soft and strong composite sheet for artificial leather that comprises (A) a woven or knitted fabric layer and (B) a non-woven layer intertwined with the fabric. The (A) layer comprises a high twist yarn and the (B) layer has in it a number of fibers of a length greater than 20mm.

The claimed invention is patentably distinct from Mizocuchi and Honda for at least following reasons:

First, the non-woven and woven fabric layers of the claimed invention are distinguishable from those of Mizocuchi in terms of layer composition.

Specifically, the non-woven fabric constituent (B) of Mizocuchi consists of (1) numerous fibrous bundles and (2) numerous individual fibers and these components (1) and (2) exist independently from each other. Components (1) and (2) of Mizocuchi are randomly distributed and entangled with each other to form a body of non-woven fabric. See abstract and column 2, lines 31-50 of Mizocuchi.

On the contrary, the non-woven fabric layer of the claimed invention is made of ultra fine fibers.

Also, the claimed invention recites that a non-woven fabric layer is made of ultra fine fibers of a polyester based resin or a nylon based resin and a woven or knitted fabric layer is made of ultra fine fibers having the same resin as the non-woven fabric layer.

Mizocuchi exemplifies the non-woven and woven fabric layers at column 7, lines 35-59. However, Mizocuchi fails to explicitly disclose the non-woven and woven fabric layers have the same materials. For instance, Examples of Mizocuchi employ different materials for both layers. Particularly, in Example 1 of Mizocuchi, the non-woven fabric layer was made of cellulose and the woven fabric layer was made of nylon. In Example 8 of Mizocuchi, the non-woven fabric layer was made of nylon and the woven fabric layer was made of polyethylene terephthalate (PET). Therefore, it is clear that the composite sheet of Mizocuchi utilizes different resins for the non-woven and woven fabric layers. This teaches away from the claimed invention.

In connection with this part of rejection, the Examiner has indicated at page 17 of the outstanding Office Action that *“even in the event that it is shown that the reference does not*

teach the claimed material in both layers with sufficient specificity, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the fabric layers from any suitable disclosed material, such as claimed, because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability and desired characteristics.”

However, it is respectfully submitted that Applicants do not agree with this indication. The attached Declaration evidences that by utilizing the same resin for both the non-woven and woven fabric layers (Sample 1: the present invention), dyeing compatibility between the non-woven and woven fabric layers results in a deeper color. Also, excellent appearance (reduced roughness), softness and touchiness are revealed. However, when the different resins are used for both fabric layers (Sample 2), the properties of Sample 2 are poorer than those of Sample 1 of the present invention. See Declaration at page 3 and Exhibit (Actual Samples 1 and 2).

If the cited art would expect these improved results, Mizoguchi would have had such an explicit disclosure. However, the cited art remains silent about them and these superior results are beyond the knowledge and skill of an ordinary person in the art. Therefore, the claimed invention must be viewed as a selection invention by choosing specific conditions (same resin components for both fabric layers) which give superior results. In this respect, Ex parte Kuhn, 132 USPQ 359 (POBA 1961) states that “the fact that a claimed product is within the broad field of the prior art and one might arrive at it by selecting specific items and conditions does not render the product obvious in the absence of some directions or reasons for making such selection”. In view of the above, Applicants respectfully submit that the Examiner has done no more than, using Applicants’ claims as a guide, select specific ingredients from the broad generic

disclosures of Mizoguchi. However, there is no direction or reason for making such selection, which is required in order for a valid *prima facie* case of obviousness.

Further, as the MPEP directs, all the claim limitations must be taught or suggested by the prior art to establish a *prima facie* case of obviousness. See MPEP § 2143.03. In light of the fact that the cited references fail to fairly teach or suggest that both fabric layers are composed of the same resins, a *prima facie* case of obviousness cannot be said to exist.

Similarly, the Honda patent does not disclose that the ultrafine fiber constituting the non-woven fabric layer and the ultrafine fiber constituting the woven (knitted) fabric layer are made by the same resin such as those of Sample 1 of the executed Declaration. All of the remaining references relied upon by the Examiner do not disclose that the ultrafine fiber constituting the non-woven fabric layer and the ultrafine fiber constituting the woven (knitted) fabric layer are made of the same resin because all of these references are not related to a composite sheet but rather only to a woven fabric.

Second, the claimed invention is patentably distinct from Mizocuchi in terms of fineness of non-woven and woven fabric layers.

The claimed invention employs a woven or knitted fabric layer made of ultra fine fiber having a fineness of 0.01 to 0.3 denier. Also, in the claimed invention, the fineness of the ultra fine fibers of the woven or knitted fabric layer is not more than the fineness of the ultra fine fibers of the non-woven fabric layer.

Mizocuchi discloses the fineness of the woven fabric fiber layer is 3 or less denier, more preferably 0.5 to 3 denier. See column 8, lines 51-57 of Mizocuchi. However, although the claimed range “0.01 to 0.3” appears to be within the Mizocuchi range of 3 or less, Mizocuchi

fails to specifically recognize the claimed range “0.01 to 0.3” as a preferable one. Also, the fineness of the fibrous bundle of non-woven fabric layer of Mizoguchi is 1 to 200, more preferably 2 to 60. The fineness of the individual fine fibers from which the fibrous bundles are formed has a denier of 0.5 or less, more preferably 0.005 to 0.5, or most preferably 0.01 to 0.3. In fact, the fineness of the woven or knitted fabric layer of Mizoguchi is generally larger than that of the non-woven fabric layer of Mizoguchi.

In connection with this issue, the Examiner has indicated at page 3 of the outstanding Office Action that *“even in the event that it is shown that the reference does not teach the claimed denier in both layers with sufficient specificity, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the denier of the ultra fine fibers, such as to 0.01 to 0.3 denier, because it is understood by one of ordinary skill in the art that the denier determines properties such stiffness and softness and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.”*

However, it is respectfully submitted that the attached Declaration evidences that by specifying the claimed fineness range for both layers in addition to the same resins for both layers (Sample 1: the present invention), superior properties such as richness of color, excellent appearance (reduced roughness), softness and touchiness are proven as compared to Sample 2 corresponding to the cited art. Specifically, Sample 2 shows that the fineness of woven fabric fiber layer of 1.05 is outside of the claimed range and also the fineness of the woven fabric fiber layer is larger than that of the non-woven fabric fiber. Therefore, Sample 2 is in contrast to the claimed ranges. By this outside range, Sample 2 exhibits inferior properties to Sample 1 in terms

of color, softness, touchiness and roughness (appearance). See the Declaration at page 3 and Exhibit (Actual Samples 1 and 2). Also, in the previously filed Declaration of November 20, 2007, stiffness and elongation of Samples 3 and 5 having a fineness of 1.0 denier like cited art shows larger than those of Samples 2 and 4 having a fineness of 0.06 denier of the claimed invention. Accordingly, these superior effects of the claimed invention cannot be obtained with Michocuchi's preferable fineness range of 0.5 to 3 denier. Thus, the claimed fineness is beyond routine skill in the art.

If the cited art would expect these improved results, Mizoguchi would have had such an explicit disclosure as to denier values. However, the cited art remains silent about them and this distinction is beyond those of ordinary skill in the art. Thus, the claimed invention must be viewed as a selection invention by choosing specific conditions (the claimed range of woven fabric layer and range relationship between the two layers) which give superior results. With regard to this selective invention, Applicants respectfully wish to draw the Examiner's attention to the above case law and MPEP standards, which are not reiterated in this part.

Meanwhile, in the case of Honda, the fineness of yarn constituting the woven or knitted fabric layer is more than 2 denier (please refer to the Examples showing: 76 denier/36 filaments). Also, the fineness of the yarn constituting the non-woven fabric layer is less than 0.8 denier (please refer to Col. 3, lines 52-56 of Honda). Accordingly, the fineness of the yarn constituting the woven or knitted fabric layer is always larger than the fineness of the yarn constituting the non-woven fabric.

Since none of the cited references relied upon by the Examiner including Honda, Minemura, Nakagawa, Ikeda and Okamoto, either alone or in combination, recognize the

features of the present invention as discussed hereinabove, any possible combination of the cited references relied upon by the Examiner cannot possibly teach or suggest the present invention without reconstructing the teachings of the references in view of the Applicants' own disclosure. This is particularly true in the case of the Mizoguchi reference where a preferred denier range of 0.5 to 3 cannot be logically expanded to overlap with the Applicants' range of 0.01 to 0.3 denier without making use of the Applicants' disclosure.

As discussed above, the present invention is distinct from the cited art in that none of the references relied upon by the Examiner, either alone or in combination, recognize (1) a non-woven fabric layer is made of ultra fine fibers (claims 13 and 17), (2) the same resins for the non-woven and woven layers are used (claims 13 and 17), (3) a woven fabric layer has a fineness of 0.01 to 0.3 denier (claims 13 and 17), and (4) the fineness of the ultrafine fibers of the woven or knitted fabric layer is not more than the fineness of the ultrafine fibers of the non-woven fabric layer (claim 13).

Accordingly, in view of the remarks and particularly the Declaration as well as the Exhibit (Actual Samples 1 & 2), reconsideration of the rejections and allowance of all of the claims of the present application are respectfully requested.

Request for an Interview

If this Amendment does not overcome the outstanding rejections, the Examiner is respectfully requested to contact a representative for Applicants and provide a chance for conducting an interview with the Examiner and/or filing a supplemental Amendment in due course in an effort to get the case allowed.

Conclusion

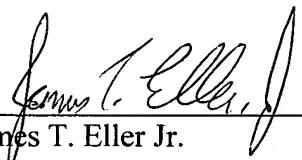
In view of the above remarks, Applicants believe that pending application is now in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact James T. Eller Jr., Reg. No. 39,538 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.147; particularly, extension of time fees.

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Respectfully submitted,

By 
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Attachments: 1. Declaration under 37 CFR 1.132
2. Exhibit (Actual Samples 1 and 2) under 37 CFR 1.91